



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,092	09/24/2001	Jianming Ye	9351-75	5987

1059 7590 09/24/2003

BERESKIN AND PARR
SCOTIA PLAZA
40 KING STREET WEST-SUITE 4000 BOX 401
TORONTO, ON M5H 3Y2
CANADA

EXAMINER

KRISHNAMURTHY, RAMESH

ART UNIT PAPER NUMBER

3753

DATE MAILED: 09/24/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/961,092

Applicant(s)

YE ET AL.

Examiner

Ramesh Krishnamurthy

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3 - 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 - 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 15 July 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

This office action is responsive to amendment filed 07/15/2003.

Claims 1 and 3 – 12 are pending.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3 – 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Griswold (US 3,336,843).

Griswold discloses a valve comprising:

- (a) A first housing (10) including a first chamber (14, 15) formed therein having an inlet associated with (14) and an outlet associated with (15) for a first fluid;
- (b) A second housing (11) including a second chamber (44) formed therein;
- (c) A flexible diaphragm (27) having an outer peripheral edge portion abutting the second housing (11) and closing off the second chamber (44);
- (d) A back pressure member (19, 24,30) moveably disposed in the first chamber (14, 15) of the first housing (10), wherein the first chamber (14, 15) is defined by the back pressure member (19, 24,30) and the first housing (10), and wherein the back pressure member is moveable to a closed position (Fig. 1) in which the back pressure member seals off the passage between the fluid inlet and the fluid outlet;

Wherein the flexible diaphragm (27) is fixed onto and moveable together with the backpressure member, whereby the pressure in the second chamber (44) determines a preset fluid pressure required to maintain the backpressure in a steady position.

Regarding claim 3, Griswold also discloses at least one port (43) in the second housing (11) for the supply of a second fluid to the second chamber (44) to set the pressure in the second chamber and thereby determine said preset fluid pressure required to maintain the back pressure member in the steady position.

Regarding claim 4, Griswold discloses a bore (defined by (16)) in the first housing (10) to which the inlet and the outlet open to, and wherein the backpressure member is slidably mounted in the bore.

Regarding claim 5, it is noted that a sleeve member (16) is provided within the first housing (10) and providing said bore for the backpressure member, wherein the opening in (16) is closed by the backpressure member.

Regarding claim 6, it is noted that holding means (36, 35) attached to the flexible diaphragm (27) and the backpressure member whereby the backpressure member and the diaphragm are moveable together.

Regarding claims 7 and 8, it is noted that the second housing (11) includes (a) spring (49) that provides an adjustable load on the diaphragm (27) and thereby adjusts the effective fluid pressure in the second chamber (44) and (b) valving associated with the pipe (43) (Col. 3, lines 11 – 15) that also adjusts the fluid pressure within the chamber (44).

Regarding claim 9 it is noted that it is a combination of claims 1 and 5 whose individual rejections are set forth above.

Claim 10 has the same limitations as Claim 6 and Claims 11 and 12 have the same limitations as claims 7 and 8 respectively.

Art Unit: 3753

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kleczek, Clayton and Alsobrooks et al. disclose various arrangements of diaphragm-based pressure regulators.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh Krishnamurthy whose telephone number is (703) 305 - 5295. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Rivell, can be reached on (703) 308 - 2599. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 - 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 0861.



Ramesh Krishnamurthy
Examiner
Art Unit 3753
September 20, 2003